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STAT

OER Contributions to OBGI Agriculture
Atlas of the USSR

S-5566

USSR Branch
8 March 1974

Agriculture in the Domestic Economy

Agriculture is the weakest and least productive sector of the Soviet economy. The system of giant collective and state farms has proved to be the worst managed and least efficient organizational form in the country. Large increases in farm gate prices and peasant incomes over the last decade have slowed the flight of labor from the farm, but have also raised costs without stimulating efficiency. In spite of the world's largest inputs of labor and investment, the USSR is periodically forced into Western markets for food to provide promised improvements in the diet for the population.

Agricultural production has a much greater impact on overall economic performance in the USSR than in the US. Although the farm sector's contribution to gross national product (GNP) has fallen rapidly over time, farm output in the USSR still accounts for more than one-fifth of the Soviet GNP and employs nearly one-third of the labor force. In the US, on the other hand, agriculture contributes just 3½% of GNP and employs only 5% of the labor force. The share of the labor force employed in agriculture has dropped in both countries, but at a much slower rate in the USSR than in the US.

(In Percent)

	1950		1960		1971	
	<u>United States</u>	<u>U.S.S.R.</u>	<u>United States</u>	<u>U.S.S.R.</u>	<u>United States</u>	<u>U.S.S.R.</u>
Agriculture's share of GNP	5.5	38.4	4.5	29.4	3.5	22.4
Agriculture's share of labor force	15.3	54.0	9.8	42.1	5.1	29.3

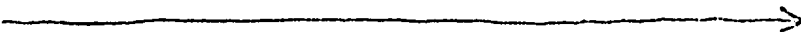
Of all sectors... of the American and Soviet economies, agriculture offers one of the greatest contrasts in terms of organization and efficiency. Although American agriculture contributes a relatively small proportion of US GNP, the US provides large quantities of food for the domestic and foreign markets.

The USSR, on the other hand, still has not managed to produce the quantity and quality of farm products desired by its population. On balance, the Soviet Union is a net importer of agricultural commodities, and has spent enormous sums on programs to boost agricultural production.

Because food accounts for nearly 50% of total consumption in the USSR and carry-over stocks are generally inadequate, fluctuations in farm output greatly affect the Soviet ability to maintain an uninterrupted rise in the level of

living of its population. In the US, in contrast, food products make up less than 1/5 of total consumption, the growth of farm output has been relatively steady, and stocks of many products are generally more than adequate to cushion the effects of minor variations in supply.

The collectivization of agriculture in the USSR has resulted in the division of farm organization into two sectors -- the socialized sector, which consists of state and collective farms and which accounts for two-thirds of agricultural production; and the private sector, which consists of small private garden plots that account for the remainder of total farm output. A major cause of inefficiency in Soviet agriculture is the collective farm system. Soviet farmers and their families work their private plots intensively and are not given adequate incentives to produce efficiently on the collective land.

Soviet agricultural output was about 70% of the US level in 1960. Since that time the dollar value of Soviet output has increased by about 35% and now stands at about three-fourths of US production. However, Soviet farm output is still dominated by bread grains and potatoes, while output of higher quality foods, particularly meat and fruits, lags 

far behind that of the United States and is patently inadequate to satisfy the growing demands of the Soviet consumer.

Soviet agricultural commodity trade

The Soviet Union normally is a net importer of agricultural commodities. The margin of imports over exports has been quite small except for 1964-66 and 1970-73 when poor harvests necessitated massive grain imports from the Free World. Trade in agricultural commodities is a significant percentage of total Soviet trade: in 1972 agricultural exports contributed 11 percent of export earnings and agricultural imports, 20 percent of import costs. By comparison, US agricultural trade in 1972 represented about the same percentage of total trade but the proportions were reversed; that is, US agricultural exports were 19 percent and agricultural imports 12 percent of their respective totals.

The rates of growth of Soviet agricultural imports and exports have differed significantly over the last 12 years. While agricultural imports have grown at about the same rate as total imports, agricultural exports have not kept pace with other exports. This is largely attributable to the relative stagnation of grain exports, consistently the largest component in this category. As a result, farm exports dropped in importance, from 21 percent of the total in 1960 to 11 percent in 1972.

Table 1

Million US \$

Commodity	1960	1965	1966	1967	1968	1969	1970	1971	1972
<u>Agricultural</u> Total Exports	1,149	1,100	1,293	1,575	1,563	1,580	1,591	1,797	1,700
Grain	468	270	232	450	383	498	435	656	600
Plant Fibers	211	350	387	390	419	337	427	453	542
Vegetable Food Oil	29	72	127	180	160	154	113	150	138
Fur and Pelts	46	58	67	58	57	53	54	55	61
Refined Sugar	25	49	66	65	88	95	113	120	6
<u>Agricultural</u> Total Imports	1,261	2,109	2,060	1,766	1,686	1,771	2,536	2,792	3,16
Grain	17	398	492	149	110	32	147	234	779
Plant Fibers	185	170	155	124	128	160	287	285	190
Unrefined Sugar	104	304	251	336	237	180	441	225	237
Veg. Fruit & Berries	111	187	196	236	252	296	378	398	488
Meat & Meat Products	30	138	75	38	38	47	107	133	97
Coffee, cocoa & tea	81	126	79	93	129	120	175	191	173
Wine	20	68	78	92	112	157	192	236	252
Tobacco	58	89	72	77	86	76	109	111	137
Natural Rubber	159	137	152	119	116	142	153	106	78

a/ Yreschnaya Torgovlya, 1960-72, converted to US\$ at official rate of exchange.

b/ Estimate

The USSR's major agricultural exports are grain and plant fibers (largely cotton) while major imports are grain, plant fibers (cotton and wool), unrefined sugar, and a commodity category which includes vegetables, fruit and berries. Thus the Soviets are in the unusual position of both exporting and importing large amounts of grain and cotton. This is mainly because of trade obligations to client states and trade in different grades or types of the same commodity.

The Soviet Union's largest trading partners for agricultural commodities -- as with total trade -- are the Communist countries. The Soviets have traditionally exported grain and other primary products to Eastern Europe in return for machinery and other manufactured goods. Since 1960, some 70 percent of total agricultural exports have gone to the Communist countries, which earns no hard currency. These countries are less important in supplying Soviet agricultural imports, averaging about 45 percent of the total. A significant percentage of these imports are supplied by the hard currency countries. This fact combined with a higher rate of growth in imports than exports means that Soviet trade in agricultural commodities has significantly contributed to the growing Soviet indebtedness to the West.

Table 2

Soviet Agricultural Commodity Trade

Million US \$

<u>Calendar Year</u>	<u>Agri- cultural Exports</u>	<u>Agri- cultural Imports</u>	<u>Net Agricultural Exports ^{a/}</u>		
			<u>Total</u>	<u>To Eastern Europe</u>	<u>To Hard Currency Countries</u>
1962	1,337	1,266	-71	577	-159
1963	1,309	1,473	-165	471	-289
1964	953	1,981	-993	305	-668
1965	1,100	2,109	-1,009	300	-510
1966	1,293	2,060	-768	374	-570
1967	1,595	1,766	-171	377	-114
1968	1,563	1,686	-123	379	-129
1969	1,560	1,771	-191	305	-145
1970	1,591	2,536	-945	305	-442
1971	1,774	2,712	-938	353	-373
1972 ^{b/}	1,700	3,107	-1,407	161	-905

a. A minus sign denotes net imports.

b. Estimated.

Since 1960, the most dynamic sector of Soviet agricultural trade has been its grain imports. A disastrous harvest in 1963 reversed the Soviets' traditional role as a net grain exporter. A poor harvest in 1972 again forced the Soviets to import record quantities of grain. This time, however, the decision to spend large amounts of hard currency for this purpose also reflected a change in agricultural and consumer policy. The Brezhnev agricultural program of 1965 to provide more meat and other quality foods rapidly raised the domestic demand for grain as livestock feed, while the use of grain for food has hardly changed. By 1969-70, grain output was not keeping pace with this demand, making deep inroads into government reserves, even in good crop years. Because these stocks had probably reached a dangerously low level by 1972, that year's poor harvest required massive grain imports if the livestock goals were not to be abandoned. More than half of these imports consisted of wheat apparently intended to replace the domestic wheat fed to livestock. Domestic wheat had been fed because of its poor milling quality and also because wheat was a better buy on world market than corn or other feedgrains.

Mechanization and Farm Technology

Soviet agriculture is far less advanced than is the US farm sector judging by (1) the proportion of the labor force employed in agricultural production; (2) the productivity per unit of land, per head of livestock, and per farm worker; and (3) the general quality of foodstuffs available for consumption in the two countries. The gap in technological application, however, is not the result of a lack of scientific knowledge. Many Soviet scientists in the various agricultural research facilities are of world class, but the gap between research findings and application is unusually wide in the USSR.

The overriding goal of agricultural planners in the USSR has been to provide agriculture with greater amounts of mechanical horsepower and the basic types of farm machinery. The same models have been turned out year after year. The development of specialized agricultural equipment has suffered especially. This does not necessarily mean that the USSR lacks the technology for the development of such machines. Rather, it reflects the preoccupation with correcting shortages of more basic types of machinery. In addition, the efficient use of Soviet mechanized equipment has been hampered by the poor state of repair work. Spare parts are in short supply, high priced and often of poor quality.

Grain production is completely mechanized in the USSR, but only 80 percent of the Soviet Union's potato crop and sugar beet crop and about one-third of the cotton crop are harvested mechanically. Specialized machines such as carrot harvesters, tea pickers, and grape pickers have been used at least experimentally in the USSR, but the level of mechanization in vegetable and fruit growing remains low. Mechanization of Soviet livestock production is probably less than in crop production. Only about 5% of the poultry in the USSR is raised in fully-mechanized operations, and almost 60% of the milking in the socialized sector is still done manually.

Soviet leaders have become increasingly aware of the need to modernize the USSR's farm sector and now place the highest priority on assimilating the newest technology, especially in the areas of livestock breeding and feed grain production. In this context, the Soviet leadership is aware of the US's leading role in farm technology and is interested in benefitting from US experience through technical exchanges and acquisition of US methods and equipment.

The Soviet Union has made definite progress in supplying chemical fertilizer to the agricultural sector. The total availability of fertilizer, for example, increased more than 9 times between 1950 and 1971 compared to a 3-fold increase

in the US. Until recently cotton and other technical crops were the main consumers of fertilizer in the USSR. Now, however, fertilizer use is shifting in favor of grain crops, as shown in the following tabulation.

PERCENT OF TOTAL FERTILIZER CONSUMED

	<u>Grains</u>	<u>Cotton</u>	<u>Other</u>
1960.	16	22	62
1968.	30	10	60
1970.	36	(1)	(1)

1 Not available.

According to the official Directives of the 1971-75 Plan, "Crop production is to be increased by means of increasing the fertility of the soil; introducing leading production techniques; rationally using mineral and organic fertilizers; extensively improving the land; conducting erosion-control measures; improving seed growing; introducing higher yielding varieties and hybrids; implementing a system of measures for protection against diseases, pests, and weeds; eliminating harvest losses; improving the structure of the sown areas; and developing proper crop rotation." The Soviets are particularly interested in developing improved varieties of grain. The increase in wheat yields that has been achieved in recent years, however, has been accompanied by a decline in protein and gluten content, and

hence in the suitability for milling and baking. In areas like the New Lands short growing seasons and other weather characteristics restrict the development of higher-yielding varieties. At the same time, yields of forage crops have virtually stagnated, placing the burden of supporting the livestock program on feed grains. The Soviets nevertheless claim that new varieties alone will increase annual grain output during 1971-75 by 10-12 million tons. Yet, the development of new crop varieties is time consuming and uncertain.

Russian geneticists have some noteworthy accomplishments to their credit, including the breeding of high yielding wheat and sunflower varieties. Despite Lysenko's legacy, they have accumulated a large inventory of crop germ plasm, hoping to overcome their lag with successful transplants of foreign varieties. Their arsenal includes the Mexican dwarf wheats, wheats from World Seeds, Inc., and many other US and foreign varieties. These transplants have not been successful. Wheats that grow short and stiff-strawed in the US have lodged badly or failed to outyield Soviet varieties under Russian conditions. Therefore, the Soviets must adapt their own varieties. The broader their germ plasm bank, the greater their chance of success. In this context, the Soviets have solicited germ plasm from US agricultural experiment stations and from US commercial firms. Stockpiling

germ plasm, however, is only the first step in developing new varieties. More important and more elusive are the techniques employed to assess and combine germ plasm. During the Lysenko era the training of competent geneticists suffered. Certainly the Soviets hope that cooperation with the US will overcome this aspect of the Lysenko legacy.

Soviet agriculture also needs assistance in developing pesticides. Losses to crops in 1970 caused by various pests, diseases, and weeds were estimated at about 20% of gross production. Requirements for pesticides to protect plants reportedly was satisfied by only 60%, while the supply of herbicides for use on beets, cotton, rice, vegetables, and other cultivated and industrial crops was especially small.

The USSR has almost as many cattle as the US and 10% more hogs. Yet total beef production is only about half of the US level while pork production is 2/3 of the US level. Russian meat shortages are due to limitations in the feed supply, particularly concentrated feeds, and to inefficient production methods. The USSR needs to restructure its livestock inventories, especially its cattle breeds. Only 25% of all cows in the US are milked; the rest are beef cows, bred and used exclusively for rearing of calves. In the USSR, in contrast, practically every cow is milked. About 60% of the USSR's cattle are classified as dual purpose and only about one-third are rated as dairy type. The Soviets

are only beginning to realize the advantages in feed conversion efficiency and cost reduction which specialized breeds and improved technology offer.

Changes are underway. US breeding stock (beef cattle, dairy cattle, swine, and angora goats) has been added in the last two years to the existing nucleus of foreign breeds in Soviet herds. Another mechanism for rapid improvement is available. In 1970, 71% of the cows, 74% of the sheep and goats, and 15% of the sows were bred artificially. By the end of 1980, artificial insemination is to be extended to the entire livestock program.

The current Soviet program of concentrating livestock in large-scale complexes reflects a preoccupation with bigness. Much of this construction has turned out to be unduly expensive, unnecessary, and even detrimental to production. Potential economies of scale have been thwarted by inadequate provision of feed, lack of suitable equipment, and inexperienced management. The Soviets could benefit from the more efficient design of US facilities and equipment as well as the methods of feeding and handling animals in large concentrations. The USSR is aware of the spectacular results achieved in the US in terms of weight gain per period of time and per unit of feed. The USSR will not be

able to grow the corn and soybeans which are the basis of the US rations, but the US livestock nutrition experience has other lessons which can be applied in the Soviet environment. The Soviets, for example, could learn the apparent advantages of using non-protein nitrogen in ruminant rations.

Marketing

In the USSR marketing of farm products is handled primarily by state purchasing organs according to a general plan with fixed delivery quotas for each product at prices established by the state planning administration. The base price for planned deliveries is fixed, but the state will pay substantial premia -- as much as 50 percent above the base price -- for above-plan sales of grain, sugar beets, livestock products, and some vegetables. For some products such as raw cotton, flax fiber, sugar beets, tobacco, tea leaves, and wool, almost 100 percent of production is purchased by the state; for others such as grain and potatoes, substantial portions which are needed for seed, feed, and personal consumption remain in the agricultural sector.

The Ministry of Procurements directs the organization of state purchases of all types of agricultural materials, supervises the precise fulfillment of procurement plans and meeting of contracts, and is largely responsible for inspection work. It coordinates the work of other ministries and departments which purchase agricultural products and defines the zones or areas in which they can operate. Other purchasing organizations are the Central Union of Consumer Cooperatives (Tsentsosoyuz), and the Ministries of the Food Industry, Meat and Dairy Industry, Light Industry, and Trade.

The most important procurement responsibility of the Ministry of Procurements is the purchase, storage, safety, and proper utilization of state grain resources. It maintains centralized grain drying and storage facilities (on-farm grain storage is managed by the farm) and operates processing plants such as mixed feed mills and flour mills. The Ministry of Procurements also handles the very important oil seed crops as well as livestock products, potatoes, other vegetables, and fruits.

Actual sales of major technical crops -- cotton, flax fiber, tobacco, tea leaves, and sugar beets -- though supervised by the Ministry of Procurements and constrained by the plan, are generally conducted on the basis of contracts concluded by factories and procurement points of the respective Ministries with individual state and collective farms. It should be noted that farms producing technical crops do so on a large scale, and because of the zonal distribution of procurement areas, are usually tied to a given factory or procurement point.

Tsentrosoyuz is an important channel for the marketing of some livestock products, potatoes and other vegetables, and fruit. It purchases not only from farms but from individuals who have surplus output from their personal plots. In 1970, Tsentrosoyuz procured all the eggs and wool purchased by the state, nearly half the potatoes, and

more than a third of the vegetables. It also procured almost half the fruit and berries, three-quarters of the mushrooms, and nearly all the honey purchased by the state.

Though state and collective farms are almost entirely subject to procurement agencies, they have a limited degree of flexibility in marketing surplus products, particularly when favorable conditions result in above-normal output. The farm can market its surplus through the collective farm markets which exist in all cities and nearly every town and village. Prices in these markets are relatively free to respond to supply and demand, and the prospect of higher prices attracts surplus farm production. As a result, the collective farm market is an important source of supply, particularly for urban residents who frequently cannot purchase good quality fruit, vegetables, and meat in the state retail trade network.

Procurement agencies are hindered by having to use fixed prices and do not have adequate storage or holding capacity. As a result they have difficulty in organizing a steady supply of raw materials to the plants within their jurisdiction. Food industry plants are forced to operate with irregular supplies -- too much or too little raw material -- and have waste and loss rates far higher than would be acceptable in Western countries. Because

food industry plants also lack storage capacity, they themselves are not able to hold produce in good condition and smooth the cycle. In short, processing facilities for most agricultural products are insufficient, and storage, transport, and refrigeration facilities, though expanding, are far from adequate.

Crop Production

The growth of Soviet crop production since World War II has depended heavily on increases in sown area. Between 1950 and 1973 total sown area in the USSR increased by nearly 169 million acres and is now nearly 75% greater than in the US. Most of the increase in sown area in the USSR occurred between 1953 and 1958 when the USSR added about 70 million acres in the "new lands" area of Siberia and Northern Kazakhstan. The "new lands" program launched in 1954 contributed significantly to the growth of Soviet agriculture. Production of grain from the "new lands" accounted for about 14% of total Soviet grain production during 1954-58. Since 1965, however, Soviet crop production has trended upward mainly because of higher yields. More fertilizer, better varieties, more agricultural machinery, better tillage practices, and greater incentives for agricultural workers and managers have contributed to increased output per acre. In 1969-73, annual average crop production was 36% above average production in 1961-65.

The largest share of total cropland in the USSR is sown to grain (60% in 1973), with food grains predominating (notably wheat and rye). In contrast, the US plants most of its grain acreage in feed grains (particularly corn).

The USSR now harvests nearly twice as much wheat as the US but only about 5% as much corn. To support its livestock program, however, the USSR has had to use as much as one-third of its wheat for livestock feed in recent years. Corn is grown less extensively than wheat because it must compete with winter wheat in the land use pattern due to the climatic constraints. Most of the corn is grown for silage rather than grain so that it can be harvested earlier in the year, leaving a longer period of time before the same area must be resown to winter wheat.

Spring wheat is the major food grain in the USSR, accounting for more than 1/2 the total food grain harvest in recent years. While yields of spring wheat are generally lower than winter wheat, the area planted to spring wheat is more than double the winter wheat area, mainly the result of vast plantings of spring wheat in the "new lands" regions. Production of wheat in the "new lands" has relieved the pressure on the traditional agricultural areas and permitted an expansion of the area planted to corn and other feed crops as well as some technical crops in the more humid areas of the European USSR. The size of the harvest varies in the "new lands", especially in the Kazakh SSR, because of extreme annual fluctuations in the amount and distribution of rainfall.

Nevertheless, the "new lands" generally have provided a hedge against national crop failure because poor crop prospects in the traditional grain area of the European USSR frequently are offset by favorable prospects in the "new lands" and vice versa. For example, in 1956 the bumper crop produced in the "new lands" offset the poor grain crop produced in the other areas. This situation also occurred in 1972, although the grain harvest in the "new lands" areas did not compensate completely for the poor harvest in other areas.

Among the major feed grains grown in the USSR, (corn, oats, and barley), barley stands out as the most significant in terms of both sown acreage and production. Because barley generally produces higher yields per acre than the other feed grains, the Soviets have given more emphasis to barley production in recent years in the overall grain structure. For example, much of the winter grains area lost to winter-kill is replanted with barley in the spring. In 1950 barley comprised only 5% of the area sown to all crops in the USSR, but in 1973 it made up 14%. Barley currently accounts for about 25% of total grain production and 56% of feed grain production.

Next to food grains, potatoes constitute the most important Soviet food crop, especially in the western and central regions of the European USSR. The area planted to

potatoes during 1955-60 varied between 22 million and 24 million acres. Since 1960, however, the area has been falling; in 1973 it was about 19 million acres. Potato yields have increased however; so that the average annual production of potatoes in 1965-73 was 12% greater than the 1957-65 average. Nevertheless, the share of potatoes in the composition of crop production declined from 40% in 1950 to 24% in 1971. By comparison the share of potatoes in US crop output has remained at about 3% since 1950.

Vegetable production accounts for less than 1% of the total sown area in the USSR. Vegetables comprise about the same share of crop output in both the US and USSR, but American farmers turn out a far greater variety of fresh vegetables than their Soviet counterparts. In the USSR, six vegetables -- beets, cabbage, carrots, cucumbers, onions, and tomatoes -- comprise 85% of total vegetable production while these same crops account for only 30% of US vegetable production.

The principal industrial food crops in Soviet agriculture are sunflower seed and sugar beets. Hardy and drought resistant, the sunflower plant is well suited to the Soviet climate, especially in the southern regions of the USSR. Soviet varieties of sunflowers are the world's best in terms of high oil content and yield of oil per land unit. Plant breeding for these characteristics, however, has reduced the

protection afforded the seed kernel by the hull and thus increased the vulnerability of the seed to deterioration caused by moisture or disease. This, in turn, may be partly responsible for the declining yields in most recent years. Poor weather, of course, also played a role. Declining yields are of concern because sunflower seed provides approximately 75 percent of domestic vegetable oil. The USSR produces over half of the world's output of sunflower seed. Sunflowers occupy less than 3 percent of total sown area, but take up almost a third of the area sown to industrial crops. The area devoted to sunflower seed increased steadily until the mid 1960's, reaching a peak of 12.1 million acres in 1965. Since then the area has declined slowly to 11.6 million acres in 1973. Yields of sunflower seed reached a peak of 13.8 centners per hectare in 1967, dropped slightly in 1968, and then trended down to a low 11.4 centners per hectare in drought-plagued 1972. Yields improved in 1973, achieving record levels in some areas. Total production in 1973 was a record 7.34 million tons.

The USSR produces about one-third of the world's output of sugar beets. Sugar beets occupy less than 2 percent of total sown area, but take up almost a quarter of the area sown to technical (industrial) crops. The area sown to sugar beets increased gradually during the

early 1960's, reaching a peak of 10.1 million acres in 1964. Since then the area has gradually declined to about 8.6 million acres in 1972 and 1973. Despite the drop in area, total sugar beet output continued to grow during the mid 1960's as yields increased. Yields reached a high of 266 centners per hectare in 1968. Poor weather in 1969 dropped yields by 20 percent and total beet output by 25 percent. Yields, which are very responsive to weather and moisture fluctuation, improved in 1970, then dropped again in 1971 and 1972. At the same time, sugar content of the beet was dropping. Indeed in 1971-72 total sugar beet production was not adequate to provide the sugar needed for domestic consumption. Aided by the unusually favorable weather and increased fertilizer supplies in 1973, yields and production expanded significantly although not to record levels. Further production increases are expected to come from increased yields and improved technology -- fertilizers, seed, and cultivation methods. Increases will not likely come from expanded area. Sugar beet production is heavily concentrated in the most favorable climatic areas, where workers, equipment, and processing facilities for this specialized crop are established. Shifting to less favorable areas would require an enormous effort and large investment allocations. Furthermore, sugar beets cannot be planted more intensively. They require a 4 to 6 year rotation to avoid severe pest and disease problems.

The most important natural fibers in the U.S.S.R. are cotton and flax. Domestic production supplies nearly all of the country's apparent consumption of these fibers. Even though the U.S.S.R. does not carry on a large volume of foreign trade in these fibers relative to domestic production, imports of cotton provide higher grades of fibers than are generally produced at home. Cotton is the leading fiber crop and principal irrigated crop in the U.S.S.R., production being second only to that of the United States. The 11% expansion in production of cotton from 1950 to 1973 was due to a variety of factors: increases in the irrigated area sown to cotton, increases in the application of fertilizer, increased price incentives, and improved production practices. However, production remains subject to vagaries of the weather and sporadic shortages of irrigation water. The USSR is the world's largest producer of flax fiber; its share of total world output has averaged 65% in recent years. The area planted to flax fiber declined from 4.7 million acres in 1950 to 3.0 million acres in 1973 while production rose from 255 million to 487 million metric tons.

8 March 1974

MEMORANDUM FOR: Chief, USSR-Europe Branch, OBGI

THROUGH : Director of Economic Research

THROUGH : Chief, USSR/Eastern Europe Division

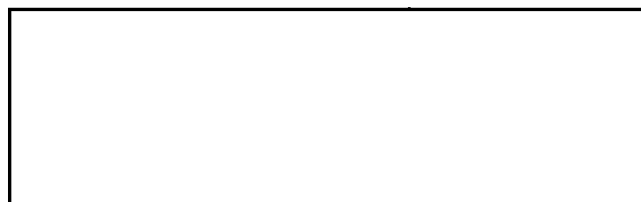
SUBJECT : OER Contributions to OBGI Atlas of USSR Agriculture STAT

REFERENCE : (1) Your memorandum to of this Branch, dated 5 February 74, subject: USSR Agriculture Atlas Contributions

(2) Memorandum from the Director, OBGI to the Director, OER, dated 1 March 74, subject: OER Contributions to the Atlas of Soviet Agriculture

I am forwarding herewith our contributions to the subject atlas, as requested in the referenced memoranda. If you have any questions, please let me know.

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(8 March 1974)

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